

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-22 (Canceled).

23. (Currently Amended) A method for simulating a communication networks network on a digital computer by means of an object based architecture in which each object represents a device of the network, the simulated network being capable of operating in accordance with ~~corresponding to~~ a plurality of different telecommunication systems, comprising ~~the step of subdividing the physical devices of the network, for simulation purposes, into:~~

identifying a first set of system-independent devices, operation of the system-independent devices being identical for each of the plurality of different telecommunication systems; ~~completely independent of the system that regulates the operation of the network, the operation of the devices of said first set thus being independent of said system;~~

identifying a second set of system-dependent devices, ~~which depend on the system under consideration, the operation of the system-dependent devices in said second set thus being specific for one of the plurality of different telecommunication systems, the second set including mobile terminal devices; the system under consideration; and~~

identifying a third set of interaction devices, ~~for the inter-work between said first set and said second set, the interaction devices of said third set being able to communicate and interact with said system-independent devices independent of the~~

~~system under consideration~~ and with said system-dependent devices; ~~which depend on the system under consideration.~~

~~said sets of devices defining a simulation architecture which is capable of allowing the simulation of a network operating according to said plurality of systems.~~

assigning to each device software modules relating to different functionalities managed by the device; and

modeling, on the digital computer, the mobile terminal devices as a grouping of modules simulating behavior of different communication protocols comprising:

application modules having a same implementation for the plurality of different telecommunication systems,

access modules being specific for the one of the plurality of different telecommunication systems, and

core network modules being used by the plurality of different telecommunication systems but with partly different operation for each of the plurality.

24. (Canceled).

25. (Currently Amended) The method as claimed in claim 23, further comprising the step of providing one of a generic switching node (NSC) of a circuit-switched network and a generic host (HOST) holding an application server of a packet-switched network ~~fixed network devices~~ in said first set.

26. (Currently Amended) The method as claimed in claim 23, further comprising the step of providing one of a mobile services switching center (MSC), a serving GPRS support node (SGSN), and a gateway GPRS support node (GGSN)

~~physical devices of the core network of a mobile communication network~~ in said third set.

27. (Currently Amended) The method as claimed in claim 23, further comprising ~~the step of providing~~ one of a BTS and BSC for a GSM/GPRS system and a Node B and an RNC for a UMTS system ~~physical devices of the access network relating to said communication network~~ in said second set.

28. (Currently Amended) The method as claimed in claim ~~23~~24, wherein the modules of said mobile terminal devices comprise a part that is common to all the systems of said plurality and a part that is specific for the one of the plurality a- ~~respective system under consideration.~~

29. (Canceled).

30. (Currently Amended) The method as claimed in claim ~~26~~ 29, further comprising ~~the steps of:~~

~~including physical devices of the so-called core network of a mobile communication network in said third set; and~~

~~configuring the set of said application modules and of said core network modules in a mobile unit.~~

31. (Currently Amended) The method as claimed in claim 30, further comprising ~~the step of configuring~~ configuring said mobile terminal devices as constituted by the composition of said mobile unit and of specific access modules of the one of the plurality of different telecommunication systems ~~system under consideration.~~

32. (Currently Amended) The method as claimed in claim 29, further comprising at least one of the ~~steps of the group:~~

making the application modules of said mobile terminal devices
communicate with ~~the~~ modules present in the system-independent devices of said first
set;

making ~~the~~ modules present in the interaction devices of said third set
communicate with the homologous modules present in said mobile terminal devices;
and

making ~~radio~~ the access modules of said mobile terminal devices
communicate with ~~the~~ modules present in the system-dependent devices of said second
set.

33. (Currently Amended) A simulator for simulating a communication
~~networks~~ network on a digital computer by means of an object based architecture in
which each object represents a device of the network, the simulated network being
capable of operating in accordance with ~~corresponding to~~ a plurality of different
telecommunication systems, comprising:

identifying a first set of system-independent devices, operation of the
system-independent devices being identical for each of the plurality of different
telecommunication systems; ~~completely independent of the system that regulates the~~
~~operation of the network, the operation of the devices of said first set thus being~~
~~independent of said system;~~

identifying a second set of system-dependent devices, which depend on
~~the system under consideration, the operation of the~~ system-dependent devices in said
second set ~~thus~~ being specific for one of the plurality of different telecommunication

systems, the second set including mobile terminal devices;~~the system under consideration;~~ and

identifying a third set of interaction devices, ~~for the inter-work between said first set and said second set,~~ the interaction devices of said third set being able to communicate and interact with said system-independent devices independent of the ~~system under consideration~~ and with said system-dependent devices; ~~which depend on the system under consideration,~~

~~said sets of devices defining a simulator architecture which is capable of allowing the simulation of a network operating according to said plurality of systems.~~

assigning to each device software modules relating to different functionalities managed by the device; and

modeling, on the digital computer, the mobile terminal devices as a grouping of modules simulating behavior of different communication protocols comprising:

application modules having a same implementation for the plurality of different telecommunication systems,

access modules being specific for the one of the plurality of different telecommunication systems, and

core network modules being used by the plurality of different telecommunication systems but with partly different operation for each of the plurality.

34. (Canceled).

35. (Currently Amended) The simulator as claimed in claim 33, wherein said first set comprises one of a generic switching node (NSC) of a circuit-switched network

and a generic host (HOST) holding an application server of a packet-switched network
~~fixed network devices.~~

36. (Currently Amended) The simulator as claimed in claim 33, wherein said third set comprises one of a mobile services switching center (MSC), a serving GPRS support node (SGSN), and a gateway GPRS support node (GGSN)~~physical devices of the core network of a mobile communication network.~~

37. (Currently Amended) The simulator as claimed in claim 33, wherein said second set comprises one of a BTS and BSC for a GSM/GPRS system and a Node B and an RNC for a UMTS system~~physical devices of the access network relating to said communication network.~~

38. (Currently Amended) The simulator as claimed in claim ~~33~~34, wherein the modules of said mobile terminal devices comprise a part that is common to all the systems of said plurality and a part that is specific for the one of the plurality~~of a respective system under consideration.~~

39. (Canceled).

40. (Currently Amended) The simulator as claimed in claim ~~36~~39, wherein:
~~said third set comprises physical devices of the so-called core network of a mobile communication network, and~~

the set of said application modules and of said core network modules is configured as a mobile unit.

41. (Currently Amended) The simulator as claimed in claim 40, wherein said mobile terminal devices comprise the composition of said mobile unit and of specific

access modules of the one of the plurality of different telecommunication systems
~~system under consideration.~~

42. (Currently Amended) The simulator as claimed in claim 39, wherein
communications are allowed according to at least one of the operations of the group:

making the application modules of said mobile terminal devices
communicate with ~~the~~ modules present in the system-independent devices of said first
set;

making ~~the~~ modules present in the interaction devices of said third set
communicate with the homologous modules present in said mobile terminal devices;
and

making ~~radio~~ the access modules of said mobile terminal devices
communicate with ~~the~~ modules present in the system-dependent devices of said second
set.

43. (Canceled).

44. (Currently Amended) A computer readable medium storing instructions
for executing a software program product capable of being loaded in the memory of at
least an electronic computer and comprising portions of software code for performing a
method for simulating a communication network on a digital computer by means of an
object based architecture in which each object represents a device of the network, the
simulated network being capable of operating in accordance with a plurality of different
telecommunication systems, the comprising:

identifying a first set of system-independent devices, operation of the system-independent devices being identical for each of the plurality of different telecommunication systems;

identifying a second set of system-dependent devices, operation of the system-dependent devices in said second set being specific for one of the plurality of different telecommunication systems, the second set including mobile terminal devices;

identifying a third set of interaction devices, the interaction devices of said third set being able to communicate and interact with said system-independent devices and with said system-dependent devices;

assigning to each device software modules relating to different functionalities managed by the device; and

modeling, on the digital computer, the mobile terminal devices as a grouping of modules simulating behavior of different communication protocols comprising:

application modules having a same implementation for the plurality of different telecommunication systems,

access modules being specific for the one of the plurality of different telecommunication systems, and

core network modules being used by the plurality of different telecommunication systems but with partly different operation for each of the plurality

capable of implementing the method as claimed in claim 23.